channel networks has been described in detail in, e.g., U.S. Patent 5,976,336, which is incorporated herein by reference for all purposes. Generally, such systems employ pin electrodes that contact fluid filled reservoirs at the termini of the channels, to deliver electrical current through the various channels of the network. By controlling the amount, duration and channels through which current is applied, one can precisely control the direction and velocity of material movement through those channels. Alternatively, electrical circuits are included on the microfluidic device and are interfaced with controllers via one or more slide connectors. These instruments can be readily configured to operate in accordance with the present invention, e.g., by including an improved channel network such as those described herein, interfaced with the controller-detector instrument.

REMARKS

Applicant amends the specification to remove a typographical error. No new matter is being introduced. A marked version of the amended specification paragraph is submitted herewith as Appendix A.

In view of the foregoing amendments and remarks, Applicants believe that the present application is in condition for early examination, and action toward that end is respectfully requested. If the Examiner believes that a telephone interview would expedite the examination of this application, the Examiner is requested to contact the undersigned at the telephone number provided below.

Respectfully submitted,

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APPENDIX A
MARKED VERSION OF AMENDED SPECIFICATION PARAGRAPH

Page15, line 1:

Electrokinetic material direction systems in microfluidic channel networks typically include electrodes placed at the termini of the various channels of the channel network, e.g., at reservoirs or ports disposed at those unintersected termini. Each electrode is then coupled to one or more power supplies that deliver controlled electrical currents through the channels of the device to drive the movement of material either through electrophoresis or electroosmosis. Examples of such systems include the Agilent 2100 Bioanalyzer and associated Caliper LabChip® microfluidic devices. Electrokinetic control of material movement in microfluidic channel networks has been described in detail in, e.g., U.S. Patent **[Nos. 5,588,195 and]** 5,976,336, **[each of]** which is incorporated herein by reference for all purposes. Generally, such systems employ pin electrodes that contact fluid filled reservoirs at the termini of the channels, to deliver electrical current through the various channels of the network. By controlling the amount, duration and channels through which current is applied, one can precisely control the direction and velocity of material movement through those channels. Alternatively, electrical circuits are included on the microfluidic device and are interfaced with controllers via one or more slide connectors. These instruments can be readily configured to operate in accordance with the present invention, e.g., by including an improved channel network such as those described herein, interfaced with the controller-detector instrument.